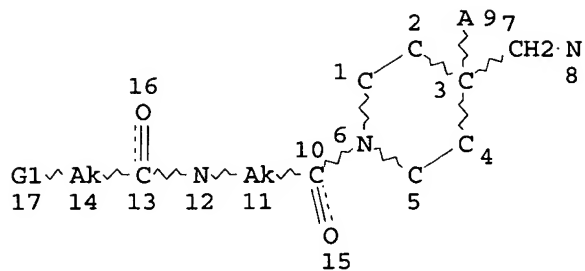


L1 HAS NO ANSWERS
L1 STR



VAR G1=N/HY
NODE ATTRIBUTES:
NSPEC IS R AT 8
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 1
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

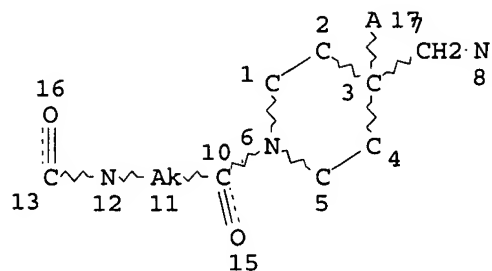
=> s l1 ful
FULL SEARCH INITIATED 13:38:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17325 TO ITERATE

100.0% PROCESSED 17325 ITERATIONS
SEARCH TIME: 00.00.02

0 ANSWERS

L3 0 SEA SSS FUL L1

> d 14
 L4 HAS NO ANSWERS
 L4 STR



NODE ATTRIBUTES:
 NSPEC IS R AT 8
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 6
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

=> s 14 ful
 FULL SEARCH INITIATED 13:40:09 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 19833 TO ITERATE

100.0% PROCESSED 19833 ITERATIONS 4 ANSWERS
 SEARCH TIME: 00.00.01

L6 4 SEA SSS FUL L4

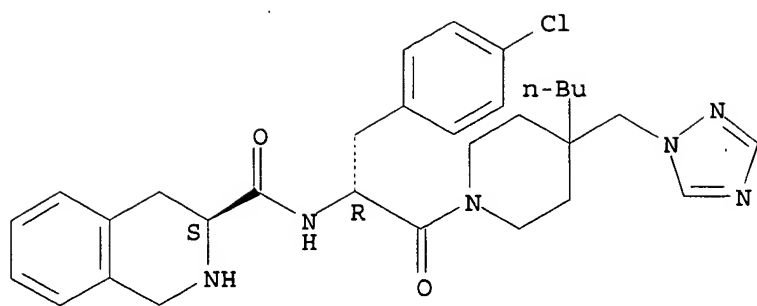
=> d 1-4

L6 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS
 RN 312637-89-1 REGISTRY
 CN 3-Isoquinolinecarboxamide, N-[(1R)-2-[4-butyl-4-(1H-1,2,4-triazol-1-ylmethyl)-1-piperidinyl]-1-[(4-chlorophenyl)methyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C31 H39 Cl N6 O2 . C2 H F3 O2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

 CM 1

 CRN 312637-88-0
 CMF C31 H39 Cl N6 O2

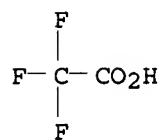
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

The chemical structure of compound 1 is a macrocyclic amide. It features a 12-membered ring with a carbonyl group (C10=O15) and a nitrogen atom (N6). Attached to the ring is a side chain consisting of a methylene group (C11), an amide group (N12-C13=O16), and a terminal amine group (CH2-N8). The atoms are numbered 1 through 16.

GRAPH ATTRIBUTES:
RSPEC 6
NUMBER OF NODES IS 14

```
=> s 17 ful
FULL SEARCH INITIATED 13:40:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 19833 TO ITERATE
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378 ANSWERS

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=> s l9 not l6
L10          374 L9 NOT L6
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=> s 110

L11 20 L10

=> d bib abs 1-20

L11 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2003:76612 CAPLUS

DN 138:137588

TI Preparation of bridged piperidine amino acid derivatives as melanocortin receptor agonists

IN Ye, Zhixiong; Barakat, Khaled J.; Guo, Liangqin; Nargund, Ravi P.; Sebhat, Iyassu K.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 105 pp.

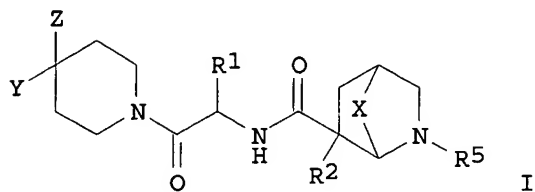
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2003007949 | A1 | 20030130 | WO 2002-US22258 | 20020712 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2001-306359P | P | 20010718 | | |
| OS | MARPAT 138:137588 | | | | |
| GI | | | | | |



AB Novel bridged piperidine derivs. I [R1 = H or (un)substituted alkyl, (CHR7)0-2cycloalkyl, (CHR7)1-2O(CHR7)aryl, or (CHR7)0-2-(hetero)aryl, where R7 = H or (un)substituted alkyl, (CH2)0-2phenyl, -naphthyl, -heteroalkyl, or -cycloalkyl; or two R7 groups may form a ring; R2 = H, alkyl, (CH2)0-2cycloalkyl or -aryl; X = (CR3R4)1-2, where R3, R4 = H, alkyl, (CH2)0-2cycloalkyl or -aryl, OH, halo, or amino; R5 = H, alkyl, (CH2)0-2-(hetero)aryl, -cycloalkyl, or -heterocyclyl, acyl, CH2C.tplbond.CH, CO2R7, CH2CHF2, CONR72, SO2R7, etc.; Y = H, (un)substituted alk(en)yl, (CH2)0-2cycloalkyl, -Ph, -naphthyl, -heteroaryl, or -heterocyclyl; Z = alkyl or (CH2)0-2 attached to certain rings or functional groups] were prepd. as agonists of human melanocortin receptor(s), in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, and sexual dysfunction. Thus, I (R1 = p-FC6H4CH2, R2 = R5 = H, X = CH2, Y = cyclohexyl, Z = Me3CNHCO) was prepd. as diastereomers

via a coupling reaction. Compds. of the invention were found to bind to MC-4R (IC50 < 2 .mu.M, EC50 < 1 .mu.M).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2002:777885 CAPLUS

DN 137:295252

TI Preparation of peptides for pharmaceutical use as modulators of melanocortin receptors

IN Yu, Guixue; Macor, John; Herpin, Timothy; Lawrence, R. Michael; Morton, George C.; Ruel, Rejean; Poindexter, Graham S.; Ruediger, Edward H.; Thibault, Carl

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 116 pp.

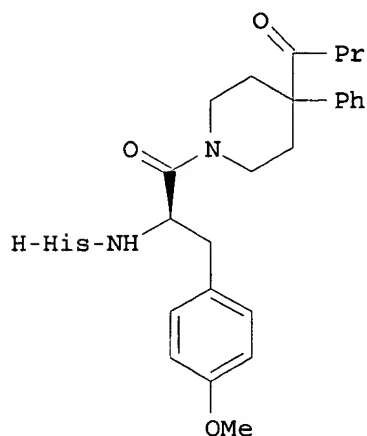
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2002079146 | A2 | 20021010 | WO 2002-US6581 | 20020302 |
| | WO 2002079146 | A3 | 20030206 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2001-273206P | P | 20010302 | | |
| | US 2001-273291P | P | 20010302 | | |
| OS | MARPAT 137:295252 | | | | |
| GI | | | | | |



I

AB Compds. W-(CH2)y(CR4R5)xCO-X(R1)CHR2(CHR3)r(CH2)sCO-E [X = N or CH; R1, R3 = H or alkyl; R2 = H, aryl, cycloalkyl, heteroaryl, heterocyclyl, (un)substituted alkyl or alkenyl; R1 together with R2 or R3 or R2 together

with R3 form mono- or bicyclic aryl, cycloalkyl, heteroaryl, or heterocyclyl; E = (un)substituted pyrrolidino, piperidino, or hexahydro-1-azepinyl; R4, R5 = H, (un)substituted alkyl, halo, hydroxy, amino, aryl, cycloalkyl, heterocyclyl, spirocycloalkyl ring; r, s = 0 or 1; x, y = 0-4; W = amino, carbamoyl, amidino, guanidino, heteroaryl, heterocyclyl, etc.] or their pharmaceutically-acceptable salts or prodrugs were prepd. as modulators of melanocortin receptors, particularly MC-1R and MC-4R. Thus, peptide I was prepd. by a soln.-phase peptide coupling/deprotection scheme.

L11 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2002:699493 CAPLUS

DN 137:362928

TI Design and pharmacology of N-[(3R)-1,2,3,4-tetrahydroisoquinolinium-3-ylcarbonyl]-(1R)-1-(4-chlorobenzyl)-2-[4-cyclohexyl-4-(1H-1,2,4-triazol-1-ylmethyl)piperidin-1-yl]-2-oxoethylamine (I), a potent, selective, melanocortin subtype-4 receptor agonist

AU Sebhat, Iyassu K.; Martin, William J.; Ye, Zhixiong; Barakat, Khaled; Mosley, Ralph T.; Johnston, David B. R.; Bakshi, Raman; Palucki, Brenda; Weinberg, David H.; MacNeil, Tanya; Kalyani, Rubana N.; Tang, Rui; Stearns, Ralph A.; Miller, Randy R.; Tamvakopoulos, Constantin; Strack, Alison M.; McGowan, Erin; Cashen, Doreen E.; Drisko, Jennifer E.; Hom, Gary J.; Howard, Andrew D.; MacIntyre, D. Euan; van der Ploeg, Lex H. T.; Patchett, Arthur A.; Nargund, Ravi P.

CS Departments of Chemistry, Pharmacology, Obesity Research, and Drug Metabolism, Merck Co. Inc., Rahway, NJ, 07065-0900, USA

SO Journal of Medicinal Chemistry (2002), 45(21), 4589-4593

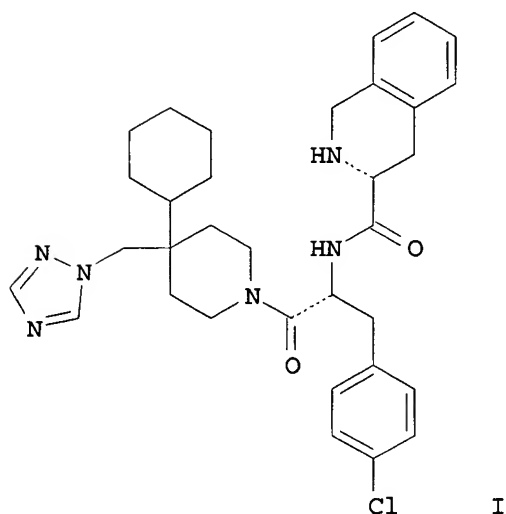
CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

GI



AB Synthetic and natural peptides that act as nonselective melanocortin receptor agonists have been found to be anorexigenic and to stimulate erectile activity. We report the design and development of (I), a potent, selective (1184-fold vs. MC3R, 350-fold vs. MC5R), small-mol. agonist of the MC4 receptor. Pharmacol. testing confirms the food intake lowering effects of MC4R agonism and suggests another role for the receptor in the

stimulation of erectile activity.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2002:695975 CAPLUS

DN 137:232913

TI Preparation of peptides for pharmaceutical use as modulators of
melanocortin receptors

IN Yu, Guixue; Macor, John; Herpin, Timothy; Lawrence, R. Michael; Morton,
George C.; Ruel, Rejean; Poindexter, Graham S.; Ruediger, Edward H.;
Thibault, Carl

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 107 pp.

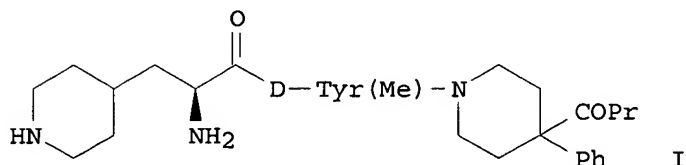
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2002070511 | A1 | 20020912 | WO 2002-US6479 | 20020302 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2001-273206P | P | 20010302 | | |
| | US 2001-273291P | P | 20010302 | | |
| OS | MARPAT 137:232913 | | | | |
| GI | | | | | |



AB Compds. W-(CR₆R₇)yCH(G)(CR₄R₅)xCO-X(R₁)CHR₂(CHR₃)r(CH₂)sCO-E [X = N or CH; R₁, R₃ = H or alkyl; R₂ = H, aryl, cycloalkyl, heteroaryl, heterocyclyl, (un)substituted alkyl or alkenyl; R₁ together with R₂ or R₃ or R₂ together with R₃ form mono- or bicyclic aryl, cycloalkyl, heteroaryl, or heterocyclyl; E = (un)substituted pyrrolidino, piperidino, hexahydro-1-azepinyl, 1-piperazinyl, cyclopentyl, cycloheptyl, amino, (cyclo)alkylamino; R₄-R₆ = H, (un)substituted alkyl, amino, alkylamino, hydroxy, alkoxy, aryl, cycloalkyl, heteroaryl, or heterocyclyl; or CR₄R₅ or C₆R₇ is a spirocycloalkyl ring; r, s = 0 or 1; x = 0-4; y = 0-2; G = alkenyl, arylalkenyl, hydroxy, heteroaryl, cyano, functionalized alkyl or alkenyl, etc.; W = amino, alkylamino, hydroxy, alkoxy, carbamoyl, amidino, cycloalkyl, heteroaryl, heterocyclyl, etc.] were prepd. as modulators of melanocortin receptors, particularly MC-1R and MC-4R. Thus, peptide I was prepd. by a soln.-phase peptide coupling/deprotection scheme.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2002:695727 CAPLUS

DN 137:226646

TI Co-administration of melanocortin receptor agonist and phosphodiesterase inhibitor for treatment of cyclic-AMP associated disorders

IN Macor, John E.; Carlson, Kenneth E.

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2002069905 | A2 | 20020912 | WO 2002-US6805 | 20020304 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2003069169 | A1 | 20030410 | US 2002-90258 | 20020304 |
| PRAI | US 2001-273206P | P | 20010302 | | |
| | US 2001-273291P | P | 20010302 | | |
| | US 2001-289719P | P | 20010509 | | |

OS MARPAT 137:226646

AB Co-administration of a melanocortin receptor agonist, particularly an MC-1R or MC-4R agonist, and a cAMP phosphodiesterase inhibitor is described for modulating levels of cyclic adenosine 3',5' monophosphate (cAMP) in a mammal. The inventive co-administration is useful in the treatment of diseases affected by activity of cAMP-PDE, including without limitation, inflammatory bowel disease, irritable bowel syndrome, rheumatoid arthritis, osteoarthritis, pancreatitis, psoriasis, migraine, Alzheimer's Disease, Parkinson's disease, transplant rejection, asthma, acute respiratory distress syndrome, chronic obstructive pulmonary disease, stroke, and neurodegeneration of, and consequences of traumatic brain injury.

L11 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2002:157581 CAPLUS

DN 136:216648

TI Preparation of substituted piperidines as melanocortin receptor agonists

IN Bakshi, Raman K.; Barakat, Khaled J.; Lai, Yingjie; Nargund, Ravi P.; Palucki, Brenda L.; Park, Min K.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | WO 2002015909 | A1 | 20020228 | WO 2001-US25757 | 20010817 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, | | | |

RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2001088285 A5 20020304 AU 2001-88285 20010817
 PRAI US 2000-227180P P 20000823
 WO 2001-US25757 W 20010817
 OS MARPAT 136:216648
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [I; X = C1-8 alkyl, alkylencycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; X = C1-8 alkyl, alkylencycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; R1 = H, C1-8 alkyl, alkylencycloalkyl, alkylenearyl, alkyleneheteroaryl; Q = amino-tetrahydronaphthyl, amino-benzocycloheptyl, methylamino-tetrahydronaphthyl, aminoindanyl, amino-benzothiopyranyl, amino-1,4-dihydro-1,4-methanonaphthyl, etc.; n = 0, 1, 2], stereoisomers, and pharmaceutically acceptable salts are prepd. as agonists of the human melanocortin receptors and, in particular, as selective agonists of the human melanocortin-4 receptor (MC-4R). Title compds. I are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Pharmaceutical compn. including title compds. I and second active ingredient are claimed. Thus, the title compd. II was prepd. from 4-F-D-Phe-4-cyclohexyl-piperidine-4-carboxylic acid Et ester HCl salt and cis-1,2,3,4-tetrahydro-1-tert-butoxycarbonyl-naphthalene-2-carboxylic acid, which was prepd. from 1,2-dihydroaphthalene, ClSO2NCO.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2001:923766 CAPLUS

DN 136:54019

TI Preparation of amino acid derivatives as serine protease inhibitors

IN Liebeschuetz, John Walter; Murray, Christopher William; Young, Stephen Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Wylie, William Alexander; Masters, John Joseph; Wiley, Michael Robert; Sheehan, Scott Martin; Engel, David Birenbaum; Watson, Brian Morgan

PA Eli Lilly and Company, USA

SO PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 13

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2001096304 | A1 | 20011220 | WO 2001-GB2572 | 20010612 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

WO 2000076971 A2 20001221 WO 2000-GB2302 20000613
 WO 2000076971 A3 20010802
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
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 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1289953 A1 20030312 EP 2001-938403 20010612
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2002151724 A1 20021017 US 2002-30186 20020204

PRAI WO 2000-GB2302 W 20000613
 GB 2000-30306 A 20001213
 GB 1999-13823 A 19990614
 US 1999-142064P P 19990702
 GB 1999-18741 A 19990809
 GB 1999-29553 A 19991214
 WO 2001-GB2572 W 20010612

OS MARPAT 136:54019

AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 is a 5- or 6-membered arom. carbon ring optionally interrupted by a N, O or S ring atom, optionally substituted at the 3 and/or 4 position or forms a fused ring system at these positions, which is an optionally substituted 5- or 6-membered carbocyclic or heterocyclic ring, or substituted at the position alpha to X-X; X is a C, N, O or S atom or a CO, CR1a, C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxyacarbonyl, alkylaminocarbonyl, alkoxyacarbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; Y is a N atom or a CR1b group (R1b defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or polycyclic, homo- or heterocyclic group; -L-Lp(D)n is 3-(Rq-CH2)-1-pyrrolidinylcarbonyl or 4-(Rq-CH2)-1-piperidinylcarbonyl, where Rq is an amino group] or their physiol.-tolerable salts were prepd. for use as serine protease and factor Xa inhibitors in the treatment of cardiovascular disorders. Compds. of the invention were found to significantly elongate the partial thromboplastin time (prothrombin time). Thus, 1-[(4-methoxybenzoyl-D-phenylglyciny)]-4-[(isopropylamino)methyl]piperidine hydrochloride was prepd. in the first of 28 examples.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE- FORMAT

L11 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2001:713326 CAPLUS

DN 135:272990

TI Preparation of piperazinylcarbonylaminomethylcarbonylpiperidines as melanocortin-4 receptor agonists

IN Palucki, Brenda L.; Barakat, Khaled J.; Guo, Liangqin; Lai, Yingjie; Nargund, Ravi P.; Park, Min K.; Pollard, Patrick G.; Sebhat, Iyassu K.; Ye, Zhixiong

PA Merck + Co., Inc., USA

SO PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2001070708 | A1 | 20010927 | WO 2001-US8935 | 20010320 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002019523 A1 20020214 US 2001-812965 20010320

US 6458790 B2 20021001

EP 1268449 A1 20030102 EP 2001-922501 20010320

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

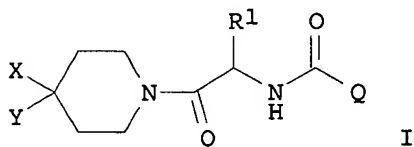
PRAI US 2000-191442P P 20000323

US 2000-242265P P 20001020

WO 2001-US8935 W 20010320

OS MARPAT 135:272990

GI



AB Title compds. [I; Q = (substituted) (fused) piperazinyl, morpholinyl, thiomorpholinyl; R1 = H, alkyl, (substituted) cycloalkyl(alkyl), aryl(alkyl), heteroaryl(alkyl), etc.; X = (substituted) alkyl, cycloalkyl(alkyl), aryl(alkyl), heteroaryl(alkyl), heterocyclyl(alkyl), cyano(alkyl), aminosulfonyl(alkyl), etc.; Y = H, alkyl, cycloalkyl(alkyl), (substituted) aryl(alkyl), heterocyclyl(alkyl), heteroaryl(alkyl)], were prepd. as melanocortin-4 receptor (MC-4R) agonists. Thus, capsule formulations contg. title compd. (II) were prepd. Representative I activated MC-4R with IC50<1 .mu.M. I are claimed for the treatment of obesity, diabetes, and sexual dysfunction including erectile dysfunction and female sexual dysfunction.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2001:567762 CAPLUS

DN 135:288736

TI Novel azo derivatives as prodrugs of 5-aminosalicylic acid and amino derivatives with potent platelet activating factor antagonist activity

AU Carceller, Elena; Salas, Jordi; Merlos, Manuel; Giral, Marta; Ferrando, Rosa; Escamilla, Ignasi; Ramis, Joaquin; Garcia-Rafanell, Julian; Forn, Javier

CS Research Center, J. Uriach & Cia.S.A., Barcelona, 08026, Spain

SO Journal of Medicinal Chemistry (2001), 44(18), 3001-3013
CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 135:288736

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB This paper describes the synthesis of a series of azo compds. able to deliver 5-aminosalicylic acid (5-ASA) and a potent platelet activating factor (PAF) antagonist in a colon-specific manner for the purpose of treating ulcerative colitis. The authors found it possible to add an amino group on the arom. moiety of 1-[(1-acyl-4-piperidyl)methyl]-1H-2-methylimidazo[4,5-c]pyridine derivs. or on British Biotech compds. BB-882 and BB-823 maintaining a high level of activity as PAF antagonist. A selected compd. UR-12715, (piperidinylmethyl)imidazopyridine I, showed an IC50 of 8 nM in the in vitro PAF-induced aggregation assay, and an ID50 of 29 .mu.g/kg in the in vivo PAF-induced hypotension test in normotensive rats. Through attachment of I to the 5-ASA via azo functionality we obtained UR-12746, (imidazopyridinylmethyl)piperidinyl benzoic acid deriv. II. Pharmacokinetics expts. with [14C]-70 allow the authors to reach the following conclusions, crit. in the design of these new prodrugs of 5-ASA. Neither the whole mol. II nor the carrier I were absorbed after oral administration of [14C]-II in rat as was demonstrated by the absence of plasma levels of radioactivity and the high recovery of it in feces. Effective cleavage of azo bond (84%) by microflora in the colon is achieved. These facts ensure high topical concns. of 5-ASA and I in the colon. Addnl., II exhibited a potent anticolitic effect in the trinitrobenzenesulfonic acid-induced colitis model in the rat. This profile suggests that UR-12746, II, provides an attractive new approach to the treatment of ulcerative colitis.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2000:900614 CAPLUS

DN 134:56958

TI Preparation of amino acid derivatives as serine protease inhibitors

IN Liebeschuetz, John Walter; Lyons, Amanda Jane; Murray, Christopher William; Rimmer, Andrew David; Young, Stephen Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Morgan, Phillip John; Richards, Simon James; Wylie, William Alexander; Masters, John Joseph; Wiley, Michael Robert

PA Eli Lilly and Company, USA; Protherics Molecular Design Limited

SO PCT Int. Appl., 261 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 13

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2000076971 | A2 | 20001221 | WO 2000-GB2302 | 20000613 |
| | WO 2000076971 | A3 | 20010802 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2000054140 | A5 | 20010102 | AU 2000-54140 | 20000613 |
| | EP 1192132 | A2 | 20020403 | EP 2000-938916 | 20000613 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | JP 2003502314 | T2 | 20030121 | JP 2001-503831 | 20000613 |
| | WO 2001096296 | A1 | 20011220 | WO 2001-GB2541 | 20010612 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, | | | |

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|------|-----------------|----|--|
| | | | GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |
| | WO 2001096303 | A1 | 20011220 WO 2001-GB2551 20010612 |
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| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |
| | WO 2001096323 | A1 | 20011220 WO 2001-GB2553 20010612 |
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| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |
| | WO 2001096304 | A1 | 20011220 WO 2001-GB2572 20010612 |
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| | EP 1289972 | A1 | 20030312 EP 2001-936686 20010612 |
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| | EP 1289950 | A1 | 20030312 EP 2001-938386 20010612 |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |
| | EP 1289953 | A1 | 20030312 EP 2001-938403 20010612 |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |
| | EP 1289954 | A1 | 20030312 EP 2001-940716 20010612 |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |
| | US 2002151724 | A1 | 20021017 US 2002-30186 20020204 |
| | NO 2002005665 | A | 20021125 NO 2002-5665 20021125 |
| PRAI | GB 1999-13823 | A | 19990614 |
| | US 1999-142064P | P | 19990702 |
| | GB 1999-18741 | A | 19990809 |
| | GB 1999-29553 | A | 19991214 |
| | WO 2000-GB2302 | A | 20000613 |
| | GB 2000-30303 | A | 20001213 |
| | GB 2000-30304 | A | 20001213 |
| | GB 2000-30305 | A | 20001213 |
| | GB 2000-30306 | A | 20001213 |
| | WO 2001-GB2541 | W | 20010612 |
| | WO 2001-GB2551 | W | 20010612 |
| | WO 2001-GB2553 | W | 20010612 |

WO 2001-GB2572 W 20010612

OS MARPAT 134:56958

AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 represents a 5- or 6-membered arom. carbon ring optionally interrupted by a N, O or S ring atom, optionally substituted at the 3 and/or 4 position or forms a fused ring system at these positions, which is an optionally substituted 5 or 6 membered carbocyclic or heterocyclic ring or substituted at the position alpha to X-X; X is a C, N, O or S atom or a CO, CR1a, C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxy carbonyl, alkylaminocarbonyl, alkoxy carbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; L is an org. linker group contg. 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; Y is a N atom or a CR1b group (R1b defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or polycyclic, homo- or heterocyclic group; Lp is a lipophilic org. group; D is a hydrogen bond donor group; n = 0-2] were prepd. for use as serine protease inhibitors. Compds. of the invention were found to significantly elongate the partial thromboplastin time (prothrombin time). Thus, 1-(3-amino-2-naphthoyl-D-phenylglyciny)-4,4'-bispiperidine was prepd. and shown to double the prothrombin time at a concn. of 26 .mu.M.

L11 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2000:900613 CAPLUS

DN 134:56957

TI Preparation of amino acid derivatives as serine protease inhibitors

IN Liebeschuetz, John Walter; Lyons, Amanda Jane; Murray, Christopher William; Rimmer, Andrew David; Young, Stephen Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Morgan, Phillip John; Richards, Simon James; Wylie, William Alexander; Lively, Sarah Elizabeth; Harrison, Martin James; Waszkowycz, Bohdan; Masters, John Joseph; Wiley, Michael John

PA Eli Lilly and Company, USA; Protherics Molecular Design Limited

SO PCT Int. Appl., 350 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 13

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

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|----|---------------|----|----------|----------------|----------|
| PI | WO 2000076970 | A2 | 20001221 | WO 2000-GB2296 | 20000613 |
| | WO 2000076970 | A3 | 20010719 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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| EP 1192135 | A2 | 20020403 | EP 2000-938912 | 20000613 |
|------------|----|----------|----------------|----------|

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

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|------|-----------------|---|----------|
| PRAI | GB 1999-13823 | A | 19990614 |
| | US 1999-142064P | P | 19990702 |
| | GB 1999-18741 | A | 19990809 |
| | GB 1999-29552 | A | 19991214 |
| | GB 1999-29553 | A | 19991214 |
| | WO 2000-GB2296 | W | 20000613 |

OS MARPAT 134:56957

AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 represents a 5- or 6-membered arom. carbon ring optionally interrupted by a N, O or S ring atom, optionally substituted at the 3 and/or 4 position or forms a fused ring system at

these positions, which is an optionally substituted 5 or 6 membered carbocyclic or heterocyclic ring; X is a C, N, O or S atom or a CO, CR1a, C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; L is an org. linker group contg. 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; Y is a N atom or a CR1b group (R1b defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or polycyclic, homo- or heterocyclic group; Lp is a lipophilic org. group; D is a hydrogen bond donor group; n = 0-2] were prepd. for use as serine protease inhibitors. Comps. of the invention were found to significantly elongate the partial thromboplastin time (prothrombin time). Thus, 1-(3-amino-2-naphthoyl-D-phenylglyciny)-4,4'-bispiperidine was prepd. and shown to double the prothrombin time at a concn. of 26 .mu.M.

L11 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 2000:880962 CAPLUS

DN 134:42445

TI Preparation of piperidine amino acid derivatives as melanocortin-4 receptor agonists

IN Bakshi, Raman K.; Barakat, Khaled J.; Nargund, Ravi P.; Palucki, Brenda L.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong; Van, Der Ploeg Leonardus H. T.

PA Merck & Co., Inc., USA; Van Der Ploeg, Leonardus H. T.

SO PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2000074679 | A1 | 20001214 | WO 2000-US14930 | 20000531 |
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| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | EP 1187614 | A1 | 20020320 | EP 2000-937961 | 20000531 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | JP 2003505435 | T2 | 20030212 | JP 2001-512328 | 20000531 |
| | US 6350760 | B1 | 20020226 | US 2000-585111 | 20000601 |
| | US 2002137664 | A1 | 20020926 | US 2001-990499 | 20011121 |
| PRAI | US 1999-137477P | P | 19990604 | | |
| | US 1999-169209P | P | 19991202 | | |
| | WO 2000-US14930 | W | 20000531 | | |
| | US 2000-585111 | A3 | 20000601 | | |
| OS | MARPAT 134:42445 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

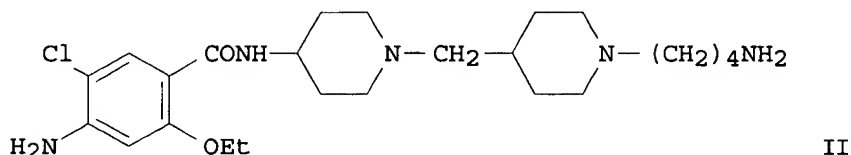
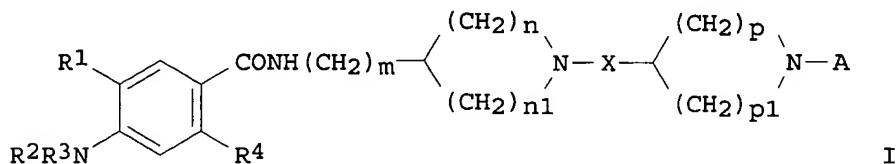
AB Piperidine derivs. I [R2C2 = aryl, 5- or 6-membered heteroaryl or heterocyclyl, 5- to 7-membered carbocyclyl, which may be substituted; L = (CRb2)m, where Rb = H, alkyl, (CH2)n-cycloalkyl or -aryl; m = 0-2, n =

0-3; X, Y = (CH₂)₀₋₂; Ra = H, alkyl, (CH₂)_n-cycloalkyl, -aryl, -heteroaryl, -O(CH₂)_naryl, which may be substituted; Re = H, alkyl, (CH₂)_n-aryl, -cycloalkyl, -heteroaryl, which may be substituted, acyl, sulfonyl, etc.; R1 = H, alkyl, (CH₂)_n-cycloalkyl, -aryl, -heteroaryl, -heterocyclyl; R2 = any group given for R1, CN, (CH₂)_n-carboxamido, -carboxy, -acylamino, sulfonylamino, -amino, etc.] were prepd. as agonists of the human melanocortin receptors, in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Thus, II trifluoroacetate, prepd. by coupling of Et 1-(D-4-chlorophenylalanyl)-4-cyclohexyl-4-[(1,2,4-triazol-1-yl)methyl]piperidine trifluoroacetate (prepn. given) with N-tert-butoxycarbonyl-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid (Boc-D-Tic), was > 2,200-fold, > 10,000-fold, and > 580-fold selective for the human MC-4R over human MC-1R, MC-2R, and MC-3R, resp.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2003 ACS
AN 1999:34578 CAPLUS
DN 130:139257
TI Preparation of 4-amino-5-halo-2-alkoxy-N-(4-piperidinylalkyl or 4-piperidinylcarbonyl)benzamides for improving digestive tract function
IN Kato, Shiro; Harada, Hiroshi; Toyotomi, Yoshihito; Yoshida, Naoyuki; Morikage, Yukiko
PA Dainippon Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 11001472 | A2 | 19990106 | JP 1997-121609 | 19970423 |
| PRAI | JP 1996-134388 | | 19960430 | | |
| | JP 1997-114430 | | 19970415 | | |
| OS | MARPAT 130:139257 | | | | |
| GI | | | | | |



AB The title compds. [I; R1 = halo; R2 = H, lower alkyl; R3 = H, lower alkyl or alkanoyl; R4 = lower alkoxy; n = 1,2; n1 = 2,3; p = 1,2; p1 = 2,3; m =

0,1,2; X = (CH₂)_r, CO(CH₂)_s; wherein r = 1,2; s = 0,1; A = (CH₂)_tCR_{5a}R_{5b}(CH₂)_qNR₆R₇, CO(CH₂)_uCR_{5a}R_{5b}(CH₂)_qNR₆R₇; wherein t = 1,2,3; q = 0,1,2,3; u = 0,1,2; R_{5a} = H, lower alkyl, HO, lower hydroxyalkyl, lower alkoxy, lower alkoxy-lower alkyl, (un)substituted NH₂, etc.; R_{5b} = H, lower alkyl; R₆ = H, lower alkyl, lower alkylsulfonyl; R₇ = H, lower alkyl; or R_{5a} and R₆ are joined together to form pyrrolidine, piperidine, hexahydroazepine, or morpholine ring; or R₆ and R₇ are joined together to form pyrrolidine, piperidine, hexahydroazepine, or optionally N-lower alkyl-substituted piperazine] are prepd. Also claimed is an improver for digestive tract function contg. above compds. I. These compds. show potent affinity to and potent agonist activity on serotonin 4 (5-HT₄) receptor and are useful for the treatment and prevention of digestive tract function disorders accompanied by various diseases or therapies. Thus, 4-amino-5-chloro-2-ethoxybenzoic acid was condensed with 4-amino-1-[1-(4-phthalimidobutyl)-4-piperidinylmethyl]piperidine using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride and Et₃N in CH₂Cl₂ at room temp. for 3 h, followed by treatment with hydrazine in ethanol under reflux and salt formation with fumaric acid, to give the title compd. (II fumarate). II fumarate showed IC₅₀ of 1.0 nM for inhibiting the binding of [3H]-GR113808 to 5-HT₄ receptor prepn. from Std-Hartley guinea pig's brain. Tablet, dispersant, and injection formulations contg. I were given.

L11 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1998:197358 CAPLUS

DN 128:257695

TI Preparation of modified amino acids and their use as calcitonin gene-related peptide antagonists in pharmaceutical compositions

IN Rudolf, Klaus; Eberlein, Wolfgang; Engel, Wolfhard; Pieper, Helmut; Doods, Henri; Hallermayer, Gerhard; Entzeroth, Michael; Wienen, Wolfgang

PA Karl Thomae G.m.b.H., Germany; Rudolf, Klaus; Eberlein, Wolfgang; Engel, Wolfhard; Pieper, Helmut; Doods, Henri; Hallermayer, Gerhard; Entzeroth, Michael; Wienen, Wolfgang

SO PCT Int. Appl., 461 pp.
CODEN: PIXXD2

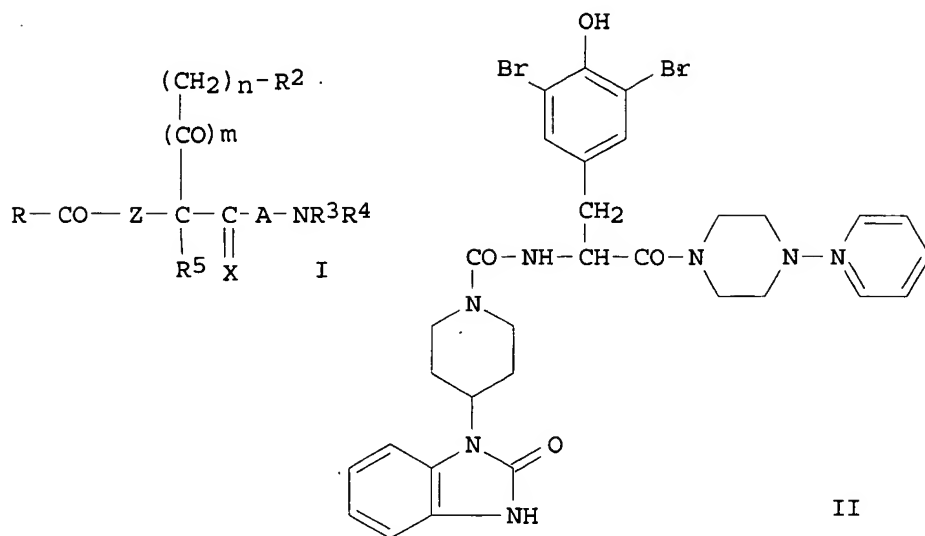
DT Patent

LA German

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|------------------|----------|
| PI | WO 9811128 | A1 | 19980319 | WO 1997-EP4862 | 19970908 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | DE 19636623 | A1 | 19980312 | DE 1996-19636623 | 19960910 |
| | DE 19720011 | A1 | 19981119 | DE 1997-19720011 | 19970514 |
| | AU 9741196 | A1 | 19980402 | AU 1997-41196 | 19970908 |
| | AU 721035 | B2 | 20000622 | | |
| | EP 927192 | A1 | 19990707 | EP 1997-938928 | 19970908 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | BR 9712023 | A | 19990831 | BR 1997-12023 | 19970908 |
| | JP 2000505100 | T2 | 20000425 | JP 1998-513227 | 19970908 |
| | NO 9901130 | A | 19990505 | NO 1999-1130 | 19990309 |
| | KR 2000044040 | A | 20000715 | KR 1999-702008 | 19990310 |
| | US 6344449 | B1 | 20020205 | US 1999-254281 | 19991012 |
| | US 2001036946 | A1 | 20011101 | US 2001-789391 | 20010221 |
| | US 2003069231 | A1 | 20030410 | US 2002-119875 | 20020410 |

PRAI DE 1996-19636623 A 19960910
 DE 1997-19720011 A 19970514
 WO 1997-EP4862 W 19970908
 US 1999-254281 A1 19991012
 US 2001-789391 A1 20010221
 OS MARPAT 128:257695
 GI



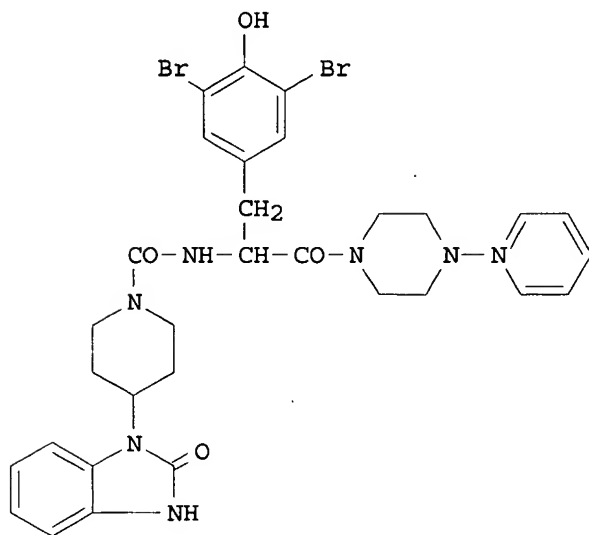
AB The invention concerns modified amino acids of general formula I [A = bond, CX; Z = CH₂, NR₁; R₁ = H, alkyl, phenyl-alkyl; X = O, H,H; n = 1-2; m = 0-1; R = (substituted)alkyl; R₂ = Ph, (substituted)(hetero)(bi)cycle; R₃ = H, (substituted)alkyl, Ph, pyridinyl; R₄ = H, (substituted)alkyl; R₃R₄ = (hetero)cycle; R₅ = H, alkyl, alkoxy-carbonyl, PhCH₂], pharmaceuticals contg. these compds., their use and the method for their prodn., as well as their use for the prodn. and purifn. of antibodies and as marked compds. in RIA and ELISA assays and as diagnostic or analytic auxiliary agents in neurotransmitter research. Thus, 3,5-dibromo-N²-[4-(1,3-dihydro-2(2H)-oxo-benzimidazol-1-yl)-1-piperidinyl]carbonyl-D-tyrosine was reacted with 1-(4-pyridinyl)-piperazine, to give II(22%). Title compds. show human calcitonin gene related peptide (CGRP) antagonist activity; in in-vitro binding studies with Sk-N-MC-cells, I had IC₅₀ .ltoreq.10000 nM, and in the same system, had CGRP-antagonist activity at doses from 10⁻¹¹ to 10⁻⁶ M.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:186625 CAPLUS
 DN 128:230701
 TI Preparation of varied amino acids as calcitonin gene-related peptide antagonists in pharmaceutical compositions
 IN Rudolf, Klaus; Eberlein, Wolfgang; Engel, Wolfhard; Pieper, Helmut; Doods, Henri; Hallermayer, Gerhard; Entzeroth, Michael; Wienen, Wolfgang
 PA Karl Thomae G.m.b.H., Germany
 SO Ger. Offen., 142 pp.
 CODEN: GWXXBX
 DT Patent
 LA German

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | DE 19636623 | A1 | 19980312 | DE 1996-19636623 | 19960910 |
| | WO 9811128 | A1 | 19980319 | WO 1997-EP4862 | 19970908 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9741196 | A1 | 19980402 | AU 1997-41196 | 19970908 |
| | AU 721035 | B2 | 20000622 | | |
| | EP 927192 | A1 | 19990707 | EP 1997-938928 | 19970908 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | BR 9712023 | A | 19990831 | BR 1997-12023 | 19970908 |
| | CN 1230196 | A | 19990929 | CN 1997-197772 | 19970908 |
| | JP 2000505100 | T2 | 20000425 | JP 1998-513227 | 19970908 |
| | ZA 9708083 | A | 19991217 | ZA 1997-8083 | 19970909 |
| | TW 477792 | B | 20020301 | TW 1997-86113120 | 19970910 |
| | NO 9901130 | A | 19990505 | NO 1999-1130 | 19990309 |
| | US 6344449 | B1 | 20020205 | US 1999-254281 | 19991012 |
| PRAI | DE 1996-19636623 | A | 19960910 | | |
| | DE 1997-19720011 | A | 19970514 | | |
| | WO 1997-EP4862 | W | 19970908 | | |
| OS | MARPAT 128:230701 | | | | |
| GI | | | | | |



II

AB Title compds. RCOZCR1R2C(:X)ANR3R4 [(I); R = (substituted) alkyl; R1 = H, alkyl, PhCH2; R2 = (CO)m(CH2)nR5; m = 0, 1; n = 1, 2; R5 = Ph, heterocycle; X = O, (H,H); Z = CH2, NR6; R6 = H, alkyl, phenyl-alkyl; A = bond, proline; R3 = H, substituted alkyl, Ph, pyridinyl; R4 = H, substituted alkyl; NR3R4 = (substituted) heterocycle], useful as calcitonin gene-related peptide (CGRP) antagonists, were prepd. Thus, 3,5-dibromo-N2-[4-(1,3-dihydro-2(2H)-oxo-benzimidazol-1-yl)-1-

piperidinyl]carbonyl-D-tyrosine was reacted with 1-(4-pyridinyl)-piperazine, to give II (22%). In in-vitro binding studies with human CGRP-receptors, I had IC50 .ltoreq.10000 nM; in CGRP-antagonist in vitro tests, I was effective at doses from 10-11 to 10-5 M.

L11 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1997:299333 CAPLUS

DN 126:277481

TI Preparation of imidazo[4,5-c]pyridine-containing azo derivatives of 5-aminosalicylic acid containing for treatment of inflammatory bowel disease

IN Carceller, Elena; Jimenez, Pere J.; Salas, Jordi; Almansa, Carmen; Bartroli, Javier; Merlos, Manel; Giral, Marta; Balsa, Dolors; Ferrando, Rosa; Garcia-Rafanell, Julian; Forn, Javier

PA J. Uriach & Cia. S.A., Spain; Carceller, Elena; Jimenez, Pere J.; Salas, Jordi; Almansa, Carmen; Bartroli, Javier; Merlos, Manel; Giral, Marta; Balsa, Dolors; et al.

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9709329 | A1 | 19970313 | WO 1996-EP3921 | 19960906 |
| | W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI | | | | |
| | ES 2106682 | A1 | 19971101 | ES 1995-1752 | 19950908 |
| | ES 2106682 | B1 | 19980701 | | |
| | ES 2104513 | A1 | 19971001 | ES 1995-1967 | 19951011 |
| | ES 2104513 | B1 | 19980701 | | |
| | CA 2204747 | AA | 19970313 | CA 1996-2204747 | 19960906 |
| | AU 9669875 | A1 | 19970327 | AU 1996-69875 | 19960906 |
| | EP 790998 | A1 | 19970827 | EP 1996-931039 | 19960906 |
| | EP 790998 | B1 | 20010117 | | |
| | R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | BR 9606628 | A | 19970930 | BR 1996-6628 | 19960906 |
| | JP 11501939 | T2 | 19990216 | JP 1996-510875 | 19960906 |
| | AT 198751 | E | 20010215 | AT 1996-931039 | 19960906 |
| | ES 2155621 | T3 | 20010516 | ES 1996-931039 | 19960906 |
| | NO 9702113 | A | 19970507 | NO 1997-2113 | 19970507 |
| | US 5747477 | A | 19980505 | US 1997-836125 | 19970508 |
| PRAI | ES 1995-1752 | A | 19950908 | | |
| | ES 1995-1967 | A | 19951011 | | |
| | WO 1996-EP3921 | W | 19960906 | | |
| OS | CASREACT 126:277481; MARPAT 126:277481 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; 4-hydroxy-3-carboxyphenylazo moiety can be at the 3- or 4-position of the benzene ring; m = 1-2; R1 = C1-4 alkyl, C3-7 cycloalkyl; a, b, c = CH, CC1-4 alkyl; X = II, III, etc.], useful for the treatment or prevention of inflammatory bowel disease, were prepd. by

converting an amine IV into the corresponding diazonium salt, and the reacting the resulting intermediate with salicylic acid. Results of studies showed, e.g., that the administration of compds. I significantly reduces TNBS-induced colonic damage in comparison with the control group ($p < 0.05$). Amines IV were also tested as inhibitors of platelet aggregation induced by PAF and of PAF-induced hypotension in normotensive rats, and, e.g., amine V showed IC_{50} of 0.019 μM against platelet aggregation induced by PAF.

L11 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1997:94071 CAPLUS

DN 126:104431

TI Preparation of heterocyclic dipeptide derivatives which promote release of growth hormone

IN Carpino, Philip A.; Jardine, Paul A. Dasilva; Lefker, Bruce A.; Ragan, John A.

PA Pfizer Inc., USA; Carpino, Philip A.; Jardine, Paul A. Dasilva; Lefker, Bruce A.; Ragan, John A.

SO PCT Int. Appl., 173 pp.

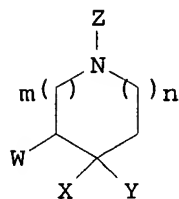
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DT Patent

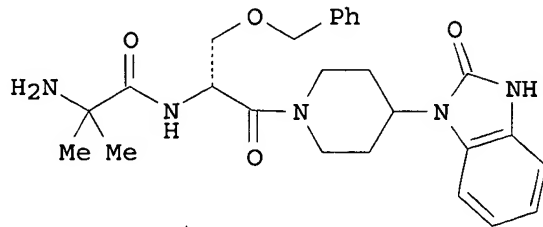
LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9638471 | A1 | 19961205 | WO 1995-IB410 | 19950529 |
| | W: CA, FI, JP, MX, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2220055 | AA | 19961205 | CA 1995-2220055 | 19950529 |
| | CA 2220055 | C | 20010424 | | |
| | EP 828754 | A1 | 19980318 | EP 1995-918123 | 19950529 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | JP 10510511 | T2 | 19981013 | JP 1995-511175 | 19950529 |
| | JP 3133073 | B2 | 20010205 | JP 1996-511175 | 19950529 |
| | NO 9602162 | A | 19961202 | NO 1996-2162 | 19960528 |
| | AU 9654554 | A1 | 19961212 | AU 1996-54554 | 19960528 |
| | CN 1143647 | A | 19970226 | CN 1996-107637 | 19960528 |
| | US 5936089 | A | 19990810 | US 1997-973268 | 19971126 |
| | FI 9704368 | A | 19971128 | FI 1997-4368 | 19971128 |
| PRAI | WO 1995-IB333 | A | 19950508 | | |
| | WO 1995-IB410 | W | 19950529 | | |
| OS | MARPAT 126:104431 | | | | |
| GI | | | | | |



I



II

AB Title compds. I [$Z = \text{COC}R_1R_2\text{cLCOANR}_4R_5$; $L = \text{NR}_6, \text{O}, \text{CH}_2$; $W = \text{H}$; W and $X =$ benzo fusion substituted with 0-3 R_{3a} , TR_{3b} , or R_{12} ; $Y = \text{H}$, C1-6 alkyl, C4-10 cycloalkyl, aryl-K, phenyl-(C1-6alkyl)-K, thienyl-(C1-6 alkyl)-K substituted with 0-3 R_{3a} , R_{3b} , or R_{12} ; $K = \text{bond}, \text{O}, \text{S}(\text{O})_m, \text{NR}_{2a}$; $X = \text{OR}_2, \text{R}_{50\text{MN}}(\text{Aryl}), \text{R}_{8\text{R}9\text{NCO}}, \text{R}_{2b\text{O}2\text{C}}, (\text{un})\text{substituted carbo- or heterobicyclic ring}$; $R_1 = (\text{un})\text{substituted C1-10 alkyl, aryl, etc.}$; $R_{2c} = \text{H}$, C1-6 alkyl, C3-7 cycloalkyl; $\text{CR}_{1\text{R}3\text{c}} = (\text{un})\text{substituted C3-8 ring}$; $R_2 = \text{H}$, C1-6 alkyl,

C3-7 cycloalkyl; R2a = H, C1-6 alkyl; R2b = H, C1-8 alkyl, C1-8 halogenated alkyl, C3-8 cycloalkyl, alkylaryl, aryl; R3a, R12 = independently H, halo, Me, OMe, CF₃; T = bond, phenylene, 5- or 6-membered heterocycle contg. 1-3 hetero atoms; R3b = H, CONR₈R₉, SO₂R₈R₉, CO₂H, CO₂(C1-6 alkyl), NR₂SO₂R₉, NR₂CONR₈R₉, NR₂SO₂NR₈R₉, NR₂COR₉, imidazolyl, thiazolyl, tetrazolyl; R4, R5 = independently H, (un)substituted C1-6 alkyl; R6 = H, C1-6 alkyl; R6CR₂c = C3-8 ring; R50 = (un)substituted morpholino, piperazino, C3-7 cycloalkyl, C1-6 alkyl; M = CO, SO₂; A = bond, Z1(CH₂)_xCR₇R_{7a}(CH₂)_y; Z1 = NR₂, O, bond; R7, R7a = independently H, CF₃, Ph, (un)substituted C1-6 alkyl; R8 = H, (un)substituted C1-6 alkyl; R9 = H, (un)substituted C1-6 alkyl, Ph, thiazolyl, imidazolyl, furyl, thienyl], are growth hormone releasing peptide mimics. Heterocyclic dipeptide derivs. I are useful for the treatment and prevention of osteoporosis (no data). Thus, condensation of Boc-D-Ser(CH₂Ph)-OH (Boc = Me₃CO₂C) with 4-(2-oxo-1-benzimidazolyl)piperidine, followed by deprotection, coupling with BocNHCM₂CO₂H, and deprotection with HCl gave dipeptide amide salt II.

L11 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1997:26293 CAPLUS

DN 126:60362

TI Preparation of heterocyclic dipeptide derivatives which promote release of growth hormone

IN Carpino, Philip A.; Jardine, Paul A. Dasilva; Lefker, Bruce A.; Ragan, John A.

PA Pfizer, Inc., USA; Carpino, Philip A.; Jardine, Paul, A. Dasilva; Lefker, Bruce A.; Ragan, John A.

SO PCT Int. Appl., 158 pp.

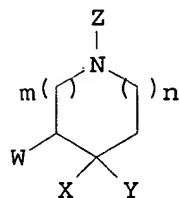
CODEN: PIXXD2

DT Patent

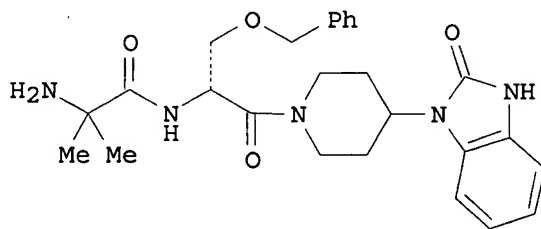
LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9635713 | A1 | 19961114 | WO 1995-IB333 | 19950508 |
| | W: CA, FI, JP, MX, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9654554 | A1 | 19961212 | AU 1996-54554 | 19960528 |
| PRAI | WO 1995-IB333 | A | 19950508 | | |
| | WO 1995-IB410 | A | 19950529 | | |
| OS | MARPAT 126:60362 | | | | |
| GI | | | | | |



I



II

AB Title compds. I [Z = COCR₁R₂cLCOANR₄R₅; L = NR₆, O, CH₂; W = H; W and X = benzo fusion optionally substituted with 1-3 R_{3a}, TR_{3b}, or R₁₂; Y = H, C1-6 alkyl, C3-10 cycloalkyl, aryl optionally substituted with 1-3 R_{3a}, R_{3b}, or R₁₂; X = OR₂, R₅₀MN(Aryl), R₈R₉NCO, R_{2b}O₂C, optionally substituted carbobicyclic or heterobicyclic ring; R₁ = optionally substituted C1-10 alkyl, aryl, etc.; R₂c = H, C1-6 alkyl, C3-7 cycloalkyl; CR₁R₃c =

optionally substituted C3-8 ring; R2 = H, C1-6 alkyl, C3-7 cycloalkyl; R2a = H, C1-6 alkyl; R2b = H, C1-8 alkyl, C1-8 halogenated alkyl, C3-8 cycloalkyl, alkylaryl, aryl; R3a, R12 = independently H, halo, Me, OMe, CF3; T = bond, phenylene, 5- or 6-membered heterocycle contg. 1-3 hetero atoms; R3b = H, CONR8R9, SO2R8R9, CO2H, CO2(C1-6 alkyl), NR2SO2R9, NR2CONR8R9, NR2SO2NR8R9, NR2COR9, imidazolyl, thiazolyl, tetrazolyl; R4, R5 = independently H, optionally substituted C1-6 alkyl; R6 = H, C1-6 alkyl; R6CR2c = C3-8 ring; R50 = optionally substituted morpholino, piperazino, C3-7 cycloalkyl, C1-6 alkyl; M = CO, SO2; A = bond, Z1(CH2)xCR7R7a(CH2)y; Z1 = NR2, O, bond; R7, R7a = independently H, CF3, Ph, optionally substituted C1-6 alkyl; R8 = H, optionally substituted C1-6 alkyl; R9 = H, optionally substituted C1-6 alkyl, Ph, thiazolyl, imidazolyl, furyl, thienyl], are growth hormone releasing peptide mimics. Heterocyclic dipeptide derivs. I are useful for the treatment and prevention of osteoporosis. Thus, condensation of Boc-D-Ser(CH2Ph)-OH (Boc = Me3CO2C) with 4-(2-oxo-1-benzimidazoliny)l)piperidine, followed by deprotection, coupling with BocNHMe2CO2H, and deprotection with HCl gave dipeptide amide salt II.

L11 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1996:462315 CAPLUS

DN 125:114623

TI Novel piperidine-imidazopyridine derivatives with PAF antagonist activity

IN Carceller, Elena; Jimenez, Pere J.; Recasens, Nuria; Salas, Jordi;

Almansa, Carmen; Bartroli, Javier

PA J Uriach y Cia. S.A., Spain

SO PCT Int. Appl., 70 pp.

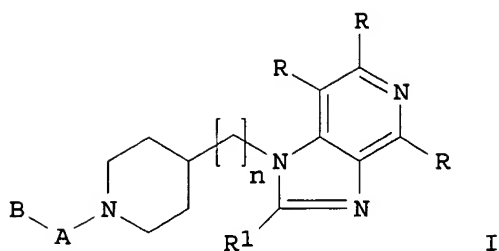
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DT Patent

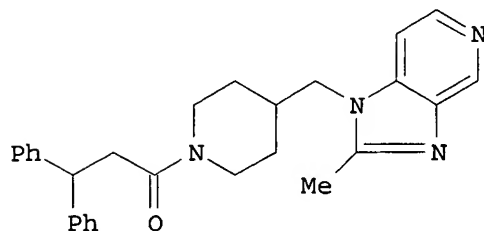
LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9614317 | A1 | 19960517 | WO 1995-EP3487 | 19950905 |
| | W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| | RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | ES 2087038 | A1 | 19960701 | ES 1994-2291 | 19941107 |
| | ES 2087038 | B1 | 19970316 | | |
| | CA 2180660 | AA | 19960517 | CA 1995-2180660 | 19950905 |
| | AU 9535636 | A1 | 19960531 | AU 1995-35636 | 19950905 |
| | EP 738269 | A1 | 19961023 | EP 1995-932668 | 19950905 |
| | EP 738269 | B1 | 20000426 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | JP 09507862 | T2 | 19970812 | JP 1995-514972 | 19950905 |
| | AT 192152 | E | 20000515 | AT 1995-932668 | 19950905 |
| | ES 2147616 | T3 | 20000916 | ES 1995-932668 | 19950905 |
| | NO 9602855 | A | 19960705 | NO 1996-2855 | 19960705 |
| | US 5705504 | A | 19980106 | US 1996-669440 | 19961022 |
| PRAI | ES 1994-2291 | A | 19941107 | | |
| | WO 1995-EP3487 | W | 19950905 | | |
| OS | MARPAT 125:114623 | | | | |
| GI | | | | | |



I



II

AB Title compds. I [$m = 0-2$; R = (independently) H, alkyl; R1 = alkyl, cycloalkyl; A = CO, SO₂, NHCO, OCO; B = various functionalized or unsatd. sidechains] and their salts and solvates are platelet activating factor (PAF) antagonists, useful in the treatment of various diseases or disorders mediated by PAF. Pharmaceutical compns. including the compds., and processes for their prepn., are also provided. Examples include 76 prepn. of I, 28 precursor prepn., 6 formulations, and 2 pharmacol. tests. For instance, 4-(aminomethyl)piperidine was converted to the 1-BOC deriv., condensed with 4-chloro-3-nitropyridine (64%), hydrogenated to an amino compd. (96%), cyclized with MeC(:NH)OEt.HCl to an imidazopyridine (95%), and deprotected (98%), to give 1-[(4-piperidyl)methyl]-1H-2-methylimidazo[4,5-c]pyridine. Amidation of this with Ph₂CHCH₂CO₂H using DCC and HOBT in DMF gave 63% title compd. II. In a test for inhibition of PAF-induced aggregation of rabbit platelets in vitro, II had IC₅₀ of 0.0076 μ M. It also inhibited PAF-induced hypertension in rats with ID₅₀ of 0.0086 mg/kg.

L11 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS

AN 1994:656333 CAPLUS

DN 121:256333

TI Preparation of antiviral peptide analogs

IN Greengrass, Colin William; Street, Stephen Derek Albert; Whittle, Peter John

PA Pfizer Ltd., UK; Pfizer Inc.

SO PCT Int. Appl., 73 pp.

CODEN: PIXXD2

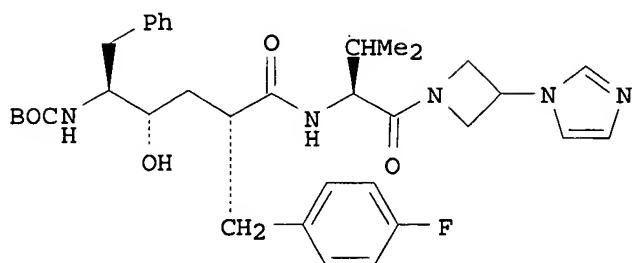
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 9319059 | A1 | 19930930 | WO 1993-EP597 | 19930313 |
| | W: AU, BG, BR, CA, CZ, FI, HU, JP, KR, NO, NZ, PL, RO, RU, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9337483 | A1 | 19931021 | AU 1993-37483 | 19930313 |
| | EP 632808 | A1 | 19950111 | EP 1993-906535 | 19930313 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | JP 07501556 | T2 | 19950216 | JP 1993-516236 | 19930313 |
| | BR 9306138 | A | 19980623 | BR 1993-6138 | 19930313 |
| | CN 1077716 | A | 19931027 | CN 1993-103206 | 19930323 |
| | ZA 9302079 | A | 19940926 | ZA 1993-2079 | 19930324 |
| | FI 9404428 | A | 19940923 | FI 1994-4428 | 19940923 |

| | | | | |
|----------------------|---|----------|--------------|----------|
| NO 9403540 | A | 19941121 | NO 1994-3540 | 19940923 |
| PRAI GB 1992-6462 | | 19920325 | | |
| GB 1993-1638 | | 19930127 | | |
| WO 1993-EP597 | | 19930313 | | |
| OS MARPAT 121:256333 | | | | |
| GI | | | | |

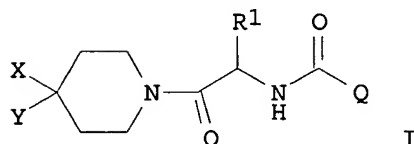


I

AB R1(CR5CR6)nO2CNHCHR2CH(OH)CH2CHR3CONHCHR4COX(CR7CR8)mX [R1 = alkyl, cycloalkyl, aryl, heterocyclyl, carbamoyl; R2 = alkyl, cycloalkylalkyl, arylalkyl, heterocyclylalkyl; R3 = alkyl, cycloalkyl, cycloalkylalkyl, arylalkyl, arylalkenyl, heterocyclylalkyl, heterocyclylalkenyl; R4 = alkyl, cycloalkyl, aryl, heterocyclyl; R5-R8 = H, alkyl, cycloalkyl; R5R6, R7R8 = atoms to form 3-8 membered carbocyclic rings; X = (substituted) mono- or bicyclic heterocyclyl; N, m = 0-2; alkyl or cycloalkyl groups may be partially or fully fluorinated], were prepd. Thus, title compd. I was prepd. by soln. phase methods. Title compds. showed IC100 = 0.1-10 .mu.g/mL againsts HIV-1 in C8166 cells.

AN 2001:713326 CAPLUS
 DN 135:272990
 TI Preparation of piperazinylcarbonylaminomethylcarbonylpiperidines as
 melanocortin-4 receptor agonists
 IN Palucki, Brenda L.; Barakat, Khaled J.; Guo, Liangqin; Lai, Yingjie;
 Nargund, Ravi P.; Park, Min K.; Pollard, Patrick G.; Sebhat, Iyassu K.;
 Ye, Zhixiong
 PA Merck + Co., Inc., USA
 SO PCT Int. Appl., 220 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2001070708 | A1 | 20010927 | WO 2001-US8935 | 20010320 |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |
| | CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, | | | | |
| | HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, | | | | |
| | LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, | | | | |
| | SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, | | | | |
| | YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, | | | | |
| | DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | | |
| | BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 2002019523 | A1 | 20020214 | US 2001-812965 | 20010320 |
| | US 6458790 | B2 | 20021001 | | |
| | EP 1268449 | A1 | 20030102 | EP 2001-922501 | 20010320 |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| | IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRAI | US 2000-191442P | P | 20000323 | | |
| | US 2000-242265P | P | 20001020 | | |
| | WO 2001-US8935 | W | 20010320 | | |
| OS | MARPAT 135:272990 | | | | |
| GI | | | | | |



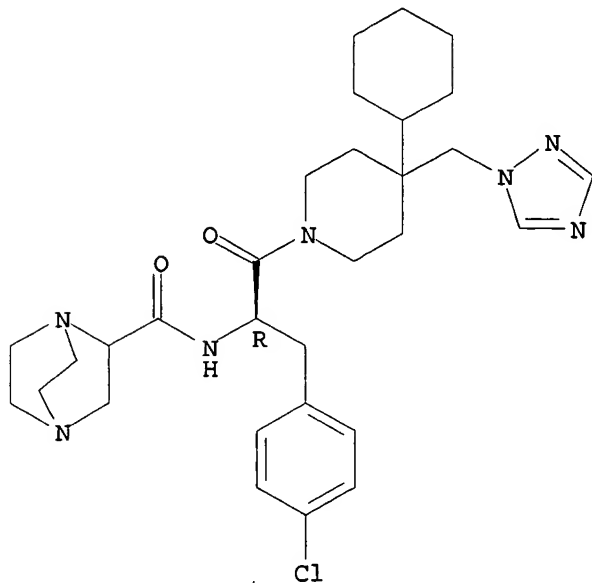
AB Title compds. [I; Q = (substituted) (fused) piperazinyl, morpholinyl, thiomorpholinyl; R1 = H, alkyl, (substituted) cycloalkyl(alkyl), aryl(alkyl), heteroaryl(alkyl), etc.; X = (substituted) alkyl, cycloalkyl(alkyl), aryl(alkyl), heteroaryl(alkyl), heterocyclyl(alkyl), cyano(alkyl), aminosulfonyl(alkyl), etc.; Y = H, alkyl, cycloalkyl(alkyl), (substituted) aryl(alkyl), heterocyclyl(alkyl), heteroaryl(alkyl)], were prepd. as melanocortin-4 receptor (MC-4R) agonists. Thus, capsule formulations contg. title compd. (II) were prepd. Representative I activated MC-4R with IC50<1 .mu.M. I are claimed for the treatment of obesity, diabetes, and sexual dysfunction including erectile dysfunction and female sexual dysfunction.

IT 363188-99-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of piperazinylcarbonylaminomethylcarbonylpiperidines as melanocortin-4 receptor agonists)

RN 363188-99-2 CAPLUS
CN 1,4-Diazabicyclo[2.2.2]octane-2-carboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-cyclohexyl-4-(1H-1,2,4-triazol-1-ylmethyl)-1-piperidinyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT